

Name Key P.
Pre-Alg Solving Equations Quiz Review

SACW

Circle your answers

- ① Distribute → multiply
- ② Combine like terms → stay on one side of = & combine
- ③ Undo → undo adding & subtracting first, then undo multiplying & dividing.

$$\begin{array}{rcl} \textcircled{1} & 3(y+4) - 6 = 30 + 6y & \\ & 3y + 12 - 6 = 30 + 6y & \\ & 3y + 6 - 6 = 30 + 6y - 6 & \\ & 3y = 24 + 6y & \\ & -6y & \\ \hline & -3y = 24 & \\ & \div -3 & \\ \hline & y = -8 & \end{array}$$

$$\begin{array}{rcl} \textcircled{2} & 4p - 8 = 2(p+7) - 2(5-3p) & \\ & 4p - 8 = 2p + 14 - 10 + 6p & \\ & 4p - 8 = 8p + 4 & \\ & -8p & \\ \hline & -4p = 12 & \\ & \div -4 & \\ \hline & p = -3 & \end{array}$$

$$\begin{array}{rcl} \textcircled{3} & 2(x+4) - 13 = 7 + 5x & \\ & 2x + 8 - 13 = 7 + 5x & \\ & 2x - 5 = 7 + 5x & \\ & -5x & \\ \hline & -3x = 12 & \\ & \div -3 & \\ \hline & x = -4 & \end{array}$$

$$\begin{array}{rcl}
 \textcircled{4} & 5m - 7 & = 3(m - 4) + m \\
 & 5m - 7 & \quad \textcircled{3m - 12} \quad \textcircled{+ m} \\
 & 5m - 7 & \quad 4m - 12 \\
 & \quad + 7 & \quad \quad + 7 \\
 \hline
 & 5m & = 4m - 5 \\
 & \quad - 4m & \quad - 4m \\
 \hline
 & \textcircled{m = -5} &
 \end{array}$$

$$\begin{array}{rcl}
 \textcircled{5} & \textcircled{3x + 11} - \textcircled{7x} & = 3x - 1 - 2 \\
 & -4x + 11 & = 3x - 3 \\
 & \quad - 11 & \quad - 11 \\
 \hline
 & -4x & = 3x - 14 \\
 & \quad - 3x & \quad - 3x \\
 \hline
 & -7x & = -14 \\
 & \div -7 & \quad \div -7 \\
 & \textcircled{x = 2} &
 \end{array}$$